## FDA Regulation of Dietary Supplements: Performance-Enhancing Products

Christine Lewis Taylor
Food & Drug Administration
Washington, DC

# FDA Authority to Regulate Dietary Supplements

• Food, Drug & Cosmetic Act

• 1994 Amendments: Dietary Supplement Health & Education Act (DSHEA)

Labels and labeling

## Issues

- What fits the definition of a dietary supplement
  - Terms from statute
  - Considerations of "intended use"
- Safety
  - Post-marketing effort / Adverse event system
  - To remove from market
     Burden of proof re: "being unsafe" (significant or unreasonable risk)
- Fraudulent claims

## DSHEA: Forms of Dietary Supplements

- Pill, capsule, liquid, powder, caplet, etc.
- But also may be in conventional food form

## DSHEA: Dietary Supplement Definition

- ...a product ... intended to supplement the diet that bears or contains one or more of the following <u>dietary ingredients</u>:
  - vitamin, mineral, or amino acid
  - herb or other botanical
  - dietary substance
  - concentrate, metabolite, constituent or combination

# Examples of Dietary Ingredients

vitamin, mineral, amino acid:

• Vitamin C, Carnitine

herb or botanical:

- Echinacea dietary substance:
- Not yet clearly defined: ??? bee pollen concentrate, metabolite, constituent:
- Not yet clearly defined: ??? melatonin

## What Are Hormones?

#### Unclear --- Drug or ? perhaps a dietary supplement

- It depends on "intended use"
  - If anabolic Drug; DEA/Schedule III
  - If precursor to Schedule III (e.g., GBL) -- Drug
  - If "street drug" alternative Drug
  - If "non-anabolic" for body-building (struc/func 'androgenic')
    - Is it a dietary ingredient intended to supplement the diet?
    - DSHEA does not address; No legislative history
    - -FDA has taken no position
    - ?Androstenedione, ?DHEA

# Safety of Dietary Supplements

- Pre-market determination is largely role of manufacturer
- FDA's responsibility is to remove unsafe ingredients or products from the market
  - Demonstrate significant or unreasonable risk
  - Reliance on passive adverse event system

# Safety Concerns: P-E Dietary Supplements

- Paucity of data, esp. for chronic use
- Marketing/use by children and adolescents
- Combinations of ingredients may have adverse consequences
- Exercise may change body's response
- Suggestion that some contain banned substances

# Claims Concerns: Fraudulent/Misleading

- Limited resources: "Safety First"
- Claims about effects
- Claims about "proven" safety or "natural" alternatives
- Commitment to address these

# Collaborative Effort

- FTC: fraudulent claims
- NIH: effectiveness
- DEA: illicit substances

## Needs

- Clarification of definitions
- Research esp. in view of post-marketing world
- Reporting of adverse events